

Alexander B. DOWELD: *Styrax mikii* and *Styrax plionipponicus* (Styracaceae), New Names of Pliocene Plants from Japanese Archipelago

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Summary: Junior homonyms of extant species, fossil *Styrax laevigatus* Miki 1941 (*Styracaceae*; non Aiton 1789) and fossil *Styrax rugosus* Miki 1941 (non Kurz 1871), are replaced with new names respectively, *S. mikii* Doweld and *S. plionipponicus* Doweld. Lectotype specimens (based on fruits) for *S. mikii* Doweld and neotype (based on seeds) for *S. plionipponicus* Doweld are designated for the first time for fossil species.

Two fossil species of *Styrax* were described by Miki (1941) on the basis of associated leaf, fruit and seed remains from the Lower Pliocene sediments of Gifu Prefecture (Japan), *Styrax laevigatus* Miki and *S. rugosus* Miki. Both names are junior homonyms of extant species of *Styrax*, *S. laevigatus* Aiton (1789) and *S. rugosus* Kurz (1871) (Plant List 2013–). The homonymy of fossil species emerged during the creation of *The International Fossil Plant Names Index* (IFPNI), which is planned to list all fossil plant species described on the Earth from 1820 (IFPNI 2014–). Since the above mentioned fossil species of *Styrax* are in current use and have no synonyms (Ozaki 1991, Tsukagoshi et al. 1995), new replacement names are proposed in accordance with the *International Code of Nomenclature for algae, fungi, and plants* (Melbourne Code: McNeill et al. 2012).

New nomenclatural acts (*nomina nova*) were registered through a pilot registration version in the *International Fossil Plant Names Index* (IFPNI 2014–), with unique persistent registration bar codes (LSIDs) listed under each newly proposed fossil plant taxon.

Styrax mikii Doweld, **nom. nov.**

≡ *Styrax laevigatus* Miki in Jap. J. Bot. 11: 295 (1941), non Aiton [in Hort. Kew. 2: 75, 1789], ut “*laevigata*”, nom. illeg.

Lectotype (here designated): [fossil fruit] JAPAN. Honshu. Gifu Prefecture, Osusawa; Pliocene (OSA F16600); figured in Miki in Jap. J. Bot. 11: fig. 20, Da (1941).

Etymology: Species is named in honor of Shigeru Miki (1901–1974).

IFPNI: 34FC2994-AA50-4F70-8F44-E62789D0E172.

Note: Among Miki’s original figured syntypes (1941) of fruits, seeds and associated leaves just a single specimen of fossil fruit is found in his collections of fossil plants housed now in Osaka Museum of Natural History, a lectotype is designated here.

Styrax plionipponicus Doweld, **nom. nov.**

≡ *Styrax rugosus* Miki in Jap. J. Bot. 11: 295 (1941), non Kurz [in J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 40(1): 61, 1871], ut “*rugosa*”, nom. illeg.

Neotype (here designated): [fossil seed] JAPAN. Honshu. Gifu Prefecture, Nakatsugawa, Itabashi; Pliocene (OSA-QB 684); figured in Tsukagoshi & al. in Bull. Osaka Mus. Nat. Hist. 49: pl. 3, figs. 5–8 (1995).

IFPNI: 40BE7660-7190-41B7-84A8-E3C7F4B63ED8.

Note: Since original syntypes of Miki (1941) were not found in Miki’s collections of fossil plants housed in Osaka Museum of Natural History, a neotype is designated here on the basis

of fossil seeds collected in the same Pliocene sediments of Gifu Prefecture.

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- A. B. Doweld : 日本産鮮新世化石植物の新学名, *Styrax mikii* と *Styrax plionipponicus* (エゴノキ科)
- 日本の鮮新世から得られた, エゴノキ属 *Styrax* (エゴノキ科) の化石植物 2 種の学名の新学名を提唱した. *Styrax laevigatus* Miki (1941) は *Styrax laevigatus* Aiton (1789) の後続同名であるので, *Styrax mikii* Doweld とし, レクトタイプを選定した. 一方, *Styrax rugosus* Miki (1941) は *Styrax rugosus* Kurz (1871) の後続同名のため, 新学名を *Styrax plionipponicus* Doweld とし, ネオタイプを選定した.
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